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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,174	07/11/2001	Hawley K. Rising III	020699-002200US	1166

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EXAMINER

CORRIELUS, JEAN M

ART UNIT	PAPER NUMBER
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2162

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/904,174

Applicant(s)

RISING ET AL.

Examiner

Jean M. Corrielus

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/28/05.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8-11,13-20 and 22-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8-11,13-15,17-20,22-24 and 26 is/are rejected.
- 7) ☒ Claim(s) 16 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the request for consideration filed on April 28, 2005, in which claims 1, 2, 4-6, 8-11, 13-20 and 22-26 are presented for further examination.

Response to Arguments

2. Applicant's arguments with respect to claims 1, 2, 4-6, 8-11, 13-20 and 22-26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-2, 4, 9-11 and 13-17 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter, specifically, as directed to an abstract idea.

Claims 1-2, 4, 9-11 and 13-17 in view of **MPEP section 2106 IV.B.2. (b)** define non-statutory processes because they merely manipulate an abstract idea without a claimed limitation to a practical application. The language of the claim raises a question as to whether the claim is directed merely to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. The invention, as claimed, is directed to the manipulation of an abstract idea with no practical application in the technology arts. Thus, the claimed are rejected as being non-statutory.

The Supreme Court has repeatedly held that abstractions are not patentable. "An idea of

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itself is not patentable". Rubber-Tip Pencil Co. V. Howard, 20 wall. 498, 07. Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basis tolls of scientific and technological work Gottschalk V. Benson, 175 USPQ 673, 675 (S Ct 1972). It is a common place that laws of nature, physical phenomena, and abstract ideas are not patentable subject matter Parker V. Flook, 197 USPQ 193, 201 (S Ct 1978). A process that consists solely of the manipulation of an abstract idea is not concrete or tangible. See In re Wamerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

Claim 1 represents an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there is any transformation of data from one state to another being performed in "A method of permitting compact ways to update fuzzy relationships between entities in an audiovideo sequence, or serial set of sequences" in claim 1. Actually, no post computer process activity is found in the technological arts. The method of permitting compact ways to update fuzzy relationships between entities in an audiovideo sequence, or serial set of sequences is not a physical transformation. Thus, no physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record and compare that random number with the previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 1 is not **tangibly embodied** in a manner so as to be executable as the only

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hardware is in an intended use statement. Claim 1 is only a software program is loaded to a computer. Therefore, claim 1 is directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result **being executed** by a general-purpose computer in order to correct the above indicated deficiencies.

The dependent claims 2, and 4 are rejected for fully incorporating the errors of their respective base claims by dependency. Thus, claims 2, and 4 are merely abstract idea and are being processed without any links to a practical result in the technology arts and without computer manipulation. They are not **tangibly embodied** in a manner so **as to be executable** as the only hardware is in an intended use statement.

Claim 9 represent an abstract idea, which do not provide a practical application in the technological arts. There is no manipulation of data nor there any transformation of data from one state to another being performed in “A method of weighting a fuzzy relation between description schemes in a content description for a multimedia sequence” in claim 9. Actually, no post computer process activity is found in the technological arts. The method of weighting a fuzzy relation between description schemes in a content description for a multimedia sequence is not a physical transformation. Thus, no physical transformation is performed, no practical application is found in the claims. Such managing data as claimed can be done in a piece of paper, where one having ordinary skill in the art would produce a random number a data record

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and compare that random number with the previously random number in the sheet. Also, the claims do not appear to correspond to a specific machine or manufacture disclosed within the specification and thus encompass any product of the class configured in any manner to perform the underlying process, and are thus rejected as being directed. Claim 9 is not **tangibly embodied** in a manner so as to **be executable** as the only hardware is in an intended use statement. Therefore, claim are directed to an abstract idea that is not tied to a technological art, environment or machine which would result in a practical application producing a concrete, useful, and tangible result to form the basis of statutory subject matter under 35 U.S.C. 101. Applicant is advised to amend the claims by specifying the claim being directed to a practical application and producing a tangible result **being executed** by a general-purpose computer in order to correct the above indicated deficiencies.

The dependent claims 10-11 and 13-17 are rejected for fully incorporating the errors of their respective base claims by dependency. Thus, claims 10-11 and 13-17 are merely abstract idea and are being processed without any links to a practical result in the technology arts and without computer manipulation. They are not **tangibly embodied** in a manner so **as to be executable** as the only hardware is in an intended use statement.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 2, 4-6, 8-11, 13-20, and 22-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The preamble of claims 1 and 12 recites “a method of permitting description of audiovisual information”. However, the body of the claim provides the use of building a graph based on the determining of a match for an entity and for a relationship of the entity. The body of the claim does not perform what set forth in the preamble. Applicants are advised to amend the claim to have a connection between the preamble and the body of the claim. Also, it is not clear as to what the Applicants are referred to “compact way”. Applicants are advised to amend the claim to clarify such “compact way” recited in the claim.

Claims 5 and 18 recite “a computer readable medium having executable instruction to cause a computer **to perform a method**”. It is not understood what type or kind of method the Applicants are referring to be executed in a computer readable medium

Claim 9 recites “a method of weighting a fuzzy relation between description schemes in a content description for a multimedia sequence”. However, the body of the claim provides the use of weighting a fuzzy relation between description schemes. The body of the claim does not perform what set forth in the preamble. Applicants are advised to amend the claim to have a connection between the preamble and the body of the claim.

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The preamble of claims 7 and 18 recites “a method of instantiating a semantic description of audiovisual information from a concept”. However, the body of the claim provides the use of characterizing semantics of the audiovisual information by logically linking entities within the semantics description. The body of the claim does not perform what set forth in the preamble. Applicants are advised to amend the claim to have a connection between the preamble and the body of the claim.

The dependent claims 2, 4, 6, 8, 10, 11, 13-17, 19, 20 and 22-26 are rejected for fully incorporating the errors of their respective base claims by dependency.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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8. Claims 1, 2, 4-6, 8-11, 13-15, 17-20, 22-24 and 26 rejected under 35 U.S.C. 102(e) as being anticipated by Benitez et al., (hereinafter "Benitez") US Patent no. 6,847,980.

As to claims 1 and 5, Benitez discloses the claimed "writing a description scheme containing relations corresponding to relationships between the entities in the audio video sequence" (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.18, lines 13-38); "determining the relations that may be represented by parameters, each parameter to define the fuzzy relationships, each parameter having a numerical values representing confidence in the corresponding fuzzy relationship" (see fig.2; col.6, lines 46-56); and "obtaining a numerical value for the parameter" (col.6, lines 45-52). Benitez provides a description definition language (DDL) is the language that allows the creation of new description schemes and descriptors. The DDL also allows an extension and modification of existing description schemes, wherein DDL has to be able to express spatial, modification of existing description schemes in order to allow fast and efficient searching and filtering for material of a user's interest (col.2, lines 38-52; col.18, lines 13-58, table 2, fig.7). This implication disclose the use of modifying the numerical values representing the confidence in response to changes in the parameter as the multimedia sequence progresses, similarly to the description provided by the Applicant's specification page 2, lines 3-7).

As to claim 2 and 6, Benitez discloses the claimed "combining an MPEG7 state DS with an additional field in a GraphType DS" (col.2, lines 39-52).

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As to claims 4 and 8, Benitez discloses the claimed “running, by a user, a query based on membership of an entity in one in the relation”(col.11, lines 53-col.12, line 26; col.16, lines 32-45; col.23, lines 58-col.24, line 27).

As to claims 9 and 18, Benitez discloses the claimed “deriving a confidence value for the fuzzy relation from a parameter associated with one of the description schemes, the confidence value representing a degree to which the fuzzy relation is a member of a subset of relations among the description schemes” (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2). Benitez provides a description definition language (DDL) is the language that allows the creation of new description schemes and descriptors. The DDL also allows an extension and modification of existing description schemes, wherein DDL has to be able to express spatial, modification of existing description schemes in order to allow fast and efficient searching and filtering for material of a user’s interest (col.2, lines 38-52; col.18, lines 13-58, table 2, fig.7). This implication disclose the use of modifying the numerical values representing the confidence in response to changes in the parameter as the multimedia sequence progresses, similarly to the description provided by the Applicant’s specification page 2, lines 3-7).

As to claims 10 and 19, Benitez discloses the claimed “wherein the parameter is an attribute value” (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2).

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As to claims 11 and 20, Benitez discloses the claimed “derived from a set of parameters associated with the description schemes” (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2).

As to claims 13 and 22, Benitez discloses the claimed “wherein the description schemes represent entities in the multimedia sequence, the fuzzy relation represents a relationship between the entities, and the confidence value represents a state of the relationship” (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2).

As to claims 14 and 23, Benitez discloses the claimed “wherein the state of the relationship is described by a state description scheme that specifies the parameter” (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2).

As to claims 15 and 24, Benitez discloses the claimed “associating the description schemes with a set of vertices in a graph and the subset of relations with a set of edges among the set of vertices” (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2); and “calculating the confidence value of the fuzzy relation using a membership function based on graph mapping” (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2).

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As to claims 17 and 26, Benitez discloses the claimed "writing the graph without the edge representing the fuzzy relation if the confidence value is zero" (col.2, lines 39-52; col.10, lines 16-21; col.11, lines 2-6; col.12, lines 27-48; col.18, lines 13-38; col.24, lines 30-53; col.30, lines 40-65; tables 1-2).

Allowable Subject Matter

9. Claims 16 and 25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112 and 101, set forth in this Office action.

Conclusion

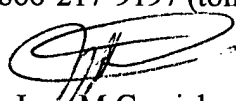
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M. Corrielus whose telephone number is (571) 272-4032.

The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jean M Corrielus
Primary Examiner
Art Unit 2162

June 30, 2005